CLAIMS

What is claimed is:

1. A method of treating hypertension, comprising administering to a patient in need thereof a pharmaceutical formulation comprising pharmaceutically active relaxin in an amount effective to reduce hypertension.

2. The method according to claim 1, wherein the hypertension is renal hypertension.

3. The method according to claim 1, wherein the hypertension is pulmonary hypertension.

4. The method of claim 1, wherein the relaxin is administered to the patient in an amount in a range of about 0.1 to 500 μg/kg of patient body weight.

5. The method of claim 1, wherein the formulation is administered daily over a period of time sufficient to obtain a therapeutic effect in the patient.

6. The method of claim 1, wherein the formulation is an injectable formulation.

7. The method of claim 1, wherein relaxin is administered to the patient at a predetermined rate so as to maintain a serum concentration of relaxin of from about 0.5 to 50 ng/ml and continuing the administration over a period of time sufficient to obtain a therapeutic effect in the patient.

8. A method of treating hypertension, comprising administering an injectable formulation comprising pharmaceutically active recombinant human relaxin to a patient in an amount in a range of about 0.1 to 500 μg/kg of patient body weight, and continuing the administration over a period of time sufficient to obtain a therapeutic effect in the patient.

9. A method of increasing vasodilation, comprising administering to a patient in need thereof a pharmaceutical formulation comprising pharmaceutically active relaxin in an amount effective to increase vasodilation.

10. The method of claim 9, wherein the relaxin is administered to the patient in an amount in a range of about 0.1 to 500 μg/kg of patient body weight.

11. The method of claim 9, wherein the formulation is an injectable formulation, wherein the pharmaceutically active recombinant human relaxin is administered to a patient in an amount in a range of about 0.1 to 500 μg/kg of patient body weight, and wherein the administration is continued over a period of time sufficient to obtain a therapeutic effect in the patient.

12. A method of increasing renal function, comprising administering to a patient in need thereof a pharmaceutical formulation comprising pharmaceutically active relaxin in an amount effective to increase a parameter associated with renal function.

13. The method of claim 12, wherein the parameter associated with renal function is glomerular filtration rate.

14. The method of claim 12, wherein the relaxin is administered to the patient in an amount in a range of about 0.1 to 500 μg/kg of patient body weight.

15. The method of claim 12, wherein the formulation is an injectable formulation, wherein the pharmaceutically active recombinant human relaxin is administered to a patient in an amount in a range of about 0.1 to 500 μg/kg of patient body weight, and wherein the administration is continued over a period of time sufficient to obtain a therapeutic effect in the patient.

16. A method of treating an ischemic condition, comprising administering to a patient in need thereof a pharmaceutical formulation comprising pharmaceutically active relaxin in an amount effective to treat the ischemic condition.

17. The method of claim 16, wherein the ischemic condition is selected from the group consisting of an ischemic wound, stroke, and an ischemic cardiac condition.

18. The method of claim 16, wherein the relaxin is administered to the patient in an amount in a range of about 0.1 to 500 μg/kg of patient body weight.

19. The method of claim 16, wherein the formulation is an injectable formulation, wherein the pharmaceutically active recombinant human relaxin is administered to a patient in an amount in a range of about 0.1 to 500 μg/kg of patient body weight, and wherein the administration is continued over a period of time sufficient to obtain a therapeutic effect in the patient.

20. A method of promoting wound healing, comprising administering to a patient in need thereof a pharmaceutical formulation comprising pharmaceutically active relaxin in an amount effective to promote wound healing.

21. The method of claim 20, wherein the relaxin is administered to the patient in an amount in a range of about 0.1 to 500 μg/kg of patient body weight.

22. The method of claim 20, wherein the formulation is an injectable formulation, wherein the pharmaceutically active recombinant human relaxin is administered to a patient in an amount in a range of about 0.1 to 500 μg/kg of patient body weight, and wherein the administration is continued over a period of time sufficient to obtain a therapeutic effect in the patient.

23. A method for increasing production of an angiogenic cytokine in an individual, comprising administering a pharmaceutical formulation comprising pharmaceutically active relaxin in an amount effective to increase production of an angiogenic cytokine.

24. The method of claim 23, wherein the angiogenic cytokine is basic fibroblast growth factor.

25. The method of claim 23, wherein the angiogenic cytokine is vascular endothelial cell growth factor.

26. A method of increasing nitric oxide production in an endothelial cell of a blood vessel endothelium, comprising administering to an individual a pharmaceutical formulation comprising pharmaceutically active relaxin in an amount effective to increase nitric oxide production in a cell of a blood vessel.

27. A method of increasing endothelin type B receptor activation in an endothelial cell in a blood vessel endothelium, comprising administering to an individual a pharmaceutical formulation comprising pharmaceutically active relaxin in an amount effective to increase endothelin type B receptor activation in a cell of a blood vessel.